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EXAMINER	
WOODS, ERIC V	
ART UNIT	**PAPER NUMBER**
2672	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/626,163	VAN DER ZIJPP, ROBERT	
	Examiner	Art Unit	
	Eric V Woods	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 August 2004* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. The disclosure is objected to because of the following informalities:

-The 'Brief Description of the Figures' section does not include Figs. 1A-1F or 9A-9F.

-Paragraph [0036], the terms "via a computer network based" are used, where this is not grammatically or idiomatically correct English. The correct terms would be either "via a computer network base" (although this would be vague) or simply "via a computer network (examiner suggests this wording).

Appropriate correction is required.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Figure 8 contains seven labeled steps (1-7) that are never mentioned in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled

"Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 2 and 3 are objected to because of the following informalities: the word "affected" is used, where the proper, idiomatic English would be "effected". Appropriate correction is required. This objection is justified because the definition (American Heritage College Dictionary) of affect is "to act on the emotions" or similar, whereas the definition of effect is "to produce [as] a result".

5. Claim 13 is objected to because of the following informality: the words "trade mark" are used where in idiomatic English the correct word is "trademark".

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> **Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.**

7. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter that is they are not in the technological arts. Claims 1-13 are directed to a process that the specification discloses to be software (see paragraph [0018], page 5 - "invention particularly related to a software process for..."), but computer readable media are not claimed, and thusly is not tangibly embodied and is not in the technological arts. Claim 14 is a process that manipulates images, however that process can be done with pencil and paper and is an abstract

idea of mental steps, as can claim 1. The process is not "technologically embodied" on a computer. Applicant needs to recite: "A computer implemented network based process for the creation..."

In order to facilitate a complete examination of the instant application, the claims rejected above under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> **A person shall be entitled to a patent unless –**
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by a mental process in a human being augmented by a sheet of paper and a pencil. The reasoning here is as follows, and will be shown for claim 1 only. [Please see MPEP 2111 [R-1] for an example of this kind of rejection and its validity, particularly In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969)].

As to claim 1,

A process for the creation of a merged imaged comprising the steps of:

-A. Preparing at least two base images in digital format; (Images in digital format do not have to be limited to a computer – simply, any image with pixels that are either on or off

(black and white) or that have discrete values of colors (e.g. typical quantized image) comprises a digital image).

-B. Selecting a pattern wherein said pattern comprises a multiplicity of cells, each cell having *n* regions wherein *n* is the number of proposed base images and wherein each region of a cell is assigned to a different prepared base image; (such patterns or overlays are known in the art – applicant admits that in the Related Prior Art section in 0008-0010, particularly with respect to film);

-C. Applying the pattern to each base image; (again, in the Related Prior Art section applicant discloses that it is known in the art to do so, particularly in 0006)

-D. Selecting a mergable portion of each respective base image wherein the mergable portion includes a file corresponding to the region of each cell assigned to the respective base image; (Prior art disclosures as stated above, and the portion of each image that was left after the pattern was applied would serve this purpose)

-E. Merging of the mergable portions of each respective base image to provide a merged image. (Again, the procedures are known in the advertising art and in the film making art (0008-0011), etc. as disclosed above)

Thusly, a mental process in a human being along with a human being could perform this task, which at its simplest would merely require the drawing of four sets of four squares on a piece of paper, each one having a discrete value (on/off), thusly being digital, and the application of the masking technique to each of the four sets of squares, and the drawing of a final set of squares containing the results as shown by applicant in Figure 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> **(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.**

11. Claims 1-13 is rejected under 35 U.S.C. 103(a) as being unpatentable over DeLeeuw et al (US 6,088,018)('DeLeeuw') in view of Delhi (US 5,638,156)('Delhi').

As to claim 1,

A process for the creation of a merged imaged comprising the steps of:

-A. Preparing at least two base images in digital format; (DeLeeuw discloses the use of a video input signal and a normal operating system signal, e.g. the "normal application program and operating system software display." *Prima facie,* both input signals are digital in nature as they are being merged within the personal computer in question.)

-B. Selecting a pattern wherein said pattern comprises a multiplicity of cells, each cell having *n* regions wherein *n* is the number of proposed base images and wherein each region of a cell is assigned to a different prepared base image; (DeLeeuw discloses in Fig. 6 a checkerboard-type pattern overlay of the two images, with the results as shown in Fig. 1, with the image appearing transparently on the monitor)(Delhi teaches in Fig. 1 the display of multiple shapes and types of pixels –e.g. the kind of pattern recited above. Further, in Figs. 12-15 the technique recited above by applicant is disclosed by Delhi.)(See Fig. 2 of Delhi and 4:5-25 where it is disclosed that the images are broken into cells having pixels, and how the pattern would be applied to base images.)

-C. Applying the pattern to each base image; (Fig. 5 illustrates multiple frame buffers, each of which would contain one base image, and such pattern would be applied to each image before insertion into the frame buffers (this is *prima facie* obvious to one of ordinary skill in the art). Further, this process is shown in more detail in Figs. 8 and 9.)(Delhi teaches this in the flowchart shown in Fig. 16, specifically, steps 306 – 312 repeated for each base image that the pattern needs to applied to exposed to create the final mosaic (e.g. see 9:34-67))(See Fig. 2 of Delhi and 4:5-25 where it is disclosed that the images are broken into cells having pixels, and how the pattern would be applied to base images.)

-D. Selecting a mergable portion of each respective base image wherein the mergable portion includes a file corresponding to the region of each cell assigned to the respective base image; (DeLeeuw clearly teaches in Figs. 8 and 9 the use of selecting mergable portions out of the first frame buffer as specified, in the early part of the merge sequence (4:15-40).)(Delhi teaches this in the flowchart shown in Fig. 16, specifically, steps 306 – 312 repeated for each base image that the pattern needs to applied to exposed to create the final mosaic (e.g. see 9:34-67))(See Fig. 2 of Delhi and 4:5-25 where it is disclosed that the images are broken into cells having pixels, and how the pattern would be applied to base images.)

-E. Merging of the mergable portions of each respective base image to provide a merged image. (DeLeeuw clearly teaches in Figs. 8 and 9 the merging of the two images after processing (interleaving is an option, specified in 4:40-67), to produce the results shown in Fig. 6).)(Delhi teaches this in the flowchart shown in Fig. 16,

specifically, steps 306 – 312 repeated for each base image that the pattern needs to applied to exposed to create the final mosaic (e.g. see 9:34-67). The final step of the merging is completed as shown in step 314.)

As discussed above, DeLeeuw clearly teaches the limitations of the claimed invention except explicitly teaching certain details of the image merge process. Reference Delhi discloses all the techniques of the stated method, except that a computer does not perform the method. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the apparatus of DeLeeuw and the image fabrication method of Delhi to allow multiple video images to projected onto the monitor of DeLeeuw instead of simply the one (as shown in DeLeeuw Fig. 6, the overlay mechanism used a checkerboard pattern, whilst Delhi teaches more advanced techniques for doing so, which would allow the display of multiple images on the monitor besides the OS environment (also see DeLeeuw 6:5-25 where it is disclosed that the percentage of pixels overlaid could be altered dynamically, which shows that it would be trivially easy to add a third image to be so interleaved, as the presence of a third frame buffer for such mixing is disclosed.) Further, under In re Venner, 120 USPQ 192 (CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 2,

A process as claimed according to claim 1 wherein the number of regions of each cell of respective base image affected by the application of the pattern is related to the number of base images to be merged.

Reference DeLeeuw implicitly teaches this limitation as discussed above in the rejection for claim 1. Reference Delhi explicitly teaches this claim, as shown in Figs. 12-15, and the mapping of the various cells and their shapes (Fig. 1) to the overall sign. Further, Delhi teaches in claim 13 that a 'plurality' of images can be used (12:50-60), and the number of cells (four) is obviously related to the number of quadrants used (four) by inherent definition of the word quadrant (or four). Since Delhi further teaches that (10:1-25) that various other forms and numbers of cells are possible, which when combined with the arrangement of cells in DeLeeuw (which are obviously related, since there are two, and the relationship is explicitly shown in Fig. 6), it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the overlay of DeLeeuw with the overlay pattern generation of Delhi. Further, under In re Venner, 120 USPQ 192 (CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 3,

A process as claimed according to claim 2, wherein the number of base images to be merged is *n*, and the number of regions of each cell of respective base image affected by the application of the pattern is *n-1*.

DeLeeuw does not explicitly teach this limitation. Delhi explicitly teaches this limitation in Figs. 12-15, where it is clear that 3 cells of the mosaic images are being blocked to allow one cell to be shown, so that when the mosaic image is formed, three (n-1) of four (n) cells are rendered opaque or blocked, as shown, again in the flowchart

listed in Fig. 16 and the reference specification in claim 2. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the overlay of DeLeeuw with the overlay pattern generation of Delhi, which would allow the display of multiple images on the monitor besides the OS environment (also see DeLeeuw 6:5-25 where it is disclosed that the percentage of pixels overlaid could be altered dynamically, which shows that it would be trivially easy to add a third image to be so interleaved, as the presence of a third frame buffer for such mixing is disclosed.). Further, under In re Venner, 120 USPQ 192 (CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 4,

A process as claimed according to claim 1 wherein the process is performed using at least one computer with software to perform the steps in the process.

Reference DeLeeuw teaches this limitation. The processing is performed on a computer, and Fig. 4 illustrates a software stack that performs all the required functionality. Further, it is well known in the art that system main memory (e.g. Fig. 3, element 112) can be used to form virtual frame buffers without requiring specialized or extra hardware, e.g. allowing a complete software implementation (21:4-16). No separate motivation or combination is required since only the primary reference is used, and that of the parent claim is incorporated herein by reference if required without further comment.

As to claim 5,

A process as claimed according to claim 1 wherein the pattern selected for application to the base images is a grid.

Reference DeLeeuw teaches this limitation clearly in Fig. 6, where the product is interleaved and the process of interleaving is extensively taught (4:10-40). Also, reference Delhi clearly teaches this in Fig. 1, and in the patterns shown in Figs. 12-15, as well as the discussion of the production of the images for use therein (see rejections to claims 1 and 3 above)(See Delhi Fig. 2, and 4:5-25 for the explanation of grid pattern). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the overlay of DeLeeuw with the overlay pattern generation of Delhi, which would allow the display of multiple images on the monitor besides the OS environment (also see DeLeeuw 6:5-25 where it is disclosed that the percentage of pixels overlaid could be altered dynamically, which shows that it would be trivially easy to add a third image to be so interleaved, as the presence of a third frame buffer for such mixing is disclosed.). Further, under In re Venner, 120 USPQ 192 (CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 6,

A process as claimed according to claim 5 wherein each base image has a grid applied to it digitally, to divide the base image into a multiplicity of cells and each cell into a multiplicity of regions.

Reference DeLeeuw teaches that a pattern or spatial multiplexing is applied to the images (see 4:10-35 – "checkerboard" for example). Since the images are being

interleaved (and they are being stored in memory for display purposes in a frame buffer, a frame buffer *prima facie* subdivides images into pixels, which clearly constitute a plurality of 'regions'), this clearly establishes that the images are being subdivided so that they may be so interleaved, which creates the 'cells' referred to by applicant. Further, Delhi teaches this method – Fig. 2 shows clearly that images are divided into cells that are repeated, as applicant claims, and that each cell is broken into pixels / regions (4:1-25). Therefore, it would be trivially obvious to modify the apparatus of DeLeeuw to perform the method of Delhi, since the base image is divided into pixels (regions, cells, etc.) and stored digitally anyway.). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the overlay of DeLeeuw with the overlay pattern generation of Delhi, which would allow the display of multiple images on the monitor besides the OS environment (also see DeLeeuw 6:5-25 where it is disclosed that the percentage of pixels overlaid could be altered dynamically, which shows that it would be trivially easy to add a third image to be so interleaved, as the presence of a third frame buffer for such mixing is disclosed.). Further, under In re Venner, 120 USPQ 192 (CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 7,

A process as claimed according to claim 6 wherein the dimension of the grid are determined relative to a dimension of either a base image or a dimension of the merged image which is required by a user.

This would be a trivial and *prima facie* modification of the methods of Delhi and DeLeeuw. Clearly, as shown in Fig. 2 of Delhi, the images can be broken down into cells and further into pixels. However, if the cells of each image could have n=4 pixels and each region could have n=1 pixel, then just as obviously each cell could have n=16 (total number of pixels shown in Fig. 2) with each region consisting of n=4 pixels. Also, as stated in DeLeeuw, the percentage of pixels being interleaved can be changed dynamically (4:10-35), which means that the number of cells would be changing on a regular basis, so it would be trivially obvious to modify the apparatus to have an adjustable grid size, as discussed by DeLeeuw in 9:25-55, where it is disclosed that various interleaving patterns could be used, including lines, which obviously means that any kind of alternating pattern (e.g. variously-sized pixels) could be used. Finally, these all relate to the grid sizing – and for larger images, obviously a larger grid size would work just as well – such a grid size could obviously simply be scaled in proportion to the image it was applied (meeting the base image requirement limitation recited in the above claim).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the overlay of DeLeeuw with the overlay pattern generation of Delhi, which would allow the display of multiple images on the monitor besides the OS environment (also see DeLeeuw 6:5-25 where it is disclosed that the percentage of pixels overlaid could be altered dynamically, which shows that it would be trivially easy to add a third image to be so interleaved, as the presence of a third frame buffer for such mixing is disclosed.). Further, under In re Venner, 120 USPQ 192

(CCPA 1958), "...it is not 'invention' to broadly provide a ... automatic means to replace manual activity which has accomplished the same result."

As to claim 8,

A process as claimed according to claim 6 wherein the cells and regions into which the grid divides each base image are sized according to a dimension of either the base image or the merged image which is required by a user.

See the above rejection of claim 7. This claim is a trivial modification thereof, wherein the only difference is that the grid resizes the cells and regions, whereas in claim 7 the grid itself is being resized. The motivation and combination of claim 7 are adopted herein by reference without further comment being required.

As to claim 9,

A process as claimed according to claim 6, wherein the cells and regions have a particular shape chosen to achieve or maintain high tolerance with regard to pixel or cells and region spacing.

Reference DeLeeuw implicitly teaches this reference (see above rejection for claim 7). Reference Delhi teaches (9:26-32) that high tolerance with regards to pixel spacing is important. Delhi further teaches that streaks are to be avoided in creating these mosaic images (9:18-29), and various shapes are shown in Fig. 1 where spacing is clearly important. Also, it is a fundamental of the art and geometry that the use of square or rectangular pixels maximizes the spacing (e.g. leaves no empty space), which is usually the goal of a display (to get maximum resolution on it). Further, cells are taught to have different shapes by Delhi (10:1-25). It would have been obvious to one

having ordinary skill in the art at the time the invention was made to combine the digital image displays of DeLeeuw with the differently shaped cells and high space tolerance of Delhi, as DeLeeuw uses spatial multiplexing techniques, and with such techniques, it would be essential that high tolerance of pixel spacing be achieved as taught by Delhi.

As to claim 10,

A process as claimed according to claim 6 wherein one or more of the base images are divided into differently shaped cells and regions.

DeLeeuw clearly teaches that various interleaving patterns can be used, including lines and various patterns, as well as different densities of interleaving (4:10-35), which implicitly covers this limitation. Delhi explicitly teaches this limitation, teaching hexagonal, elliptical, and other shapes of pixels / regions (10:1-25). It would trivially obvious to modify the digital displays of DeLeeuw to use the differently shaped pixels / interleaving patterns of Delhi. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the digital image displays of DeLeeuw with the differently shaped cells and high space tolerance of Delhi, as DeLeeuw uses spatial multiplexing techniques, and with such techniques and the varying interleaving patterns allowed, it would be obvious to use differently shaped pixels / regions as taught by Delhi.

As to claim 11,

A process as claimed according to claim 1 wherein the application of the pattern to each of the base images is such that when the selected mergable portions of each image are

combined to form the merged image, the mergable portions of each image are positioned at a predetermined spacing in relation to each other.

See the rejections for claims 5 and 6; the grid applied there, along with the regularly spaced cells and regions, clearly meets the limitations recited herein. The rejections of the above mentioned claims (particularly claim 5) are adopted with their combination and motivation herein by reference without further comment.

As to claim 12,

A process as claimed according to claim 1 wherein the selected mergable portions of each base image are merged digitally to form a single image layer.

Reference DeLeeuw teaches this limitation, and the results are shown in Figs. 1 and 2. Further, when data in a frame buffer (4:5-25) is sent to the display, the data has *prima facie* obviously been merged (this is a fundamental of the art). The motivation and combination, if necessary, of the parent claim are hereby incorporated by reference without further comment.

As to claim 13,

A process as claimed according to claim 12 wherein at least one additional layer is added to the single layer image, the entire additional layer being digitally transparent except for advertising material such as trademarks and other digital information, for example vernier scales, calibration scales, or image borders.

Reference DeLeeuw clearly teaches the use of digitally transparent layers, as shown in Fig. 2, where it is disclosed that a clock and stock ticker are overlaid onto the normal screen, but in a transparent fashion (the stock ticker and clock could obviously

be advertising)(4:15-35, transparent layer). Reference Delhi clearly teaches use of mosaics for advertising (1:10-40). It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the transparent digital layers of DeLeeuw with the mosaic techniques of Delhi, as DeLeeuw uses transparent layers and digital processing (*prima facie* digitally transparent) techniques, and with such techniques and the varying interleaving patterns allowed, it would be obvious to use advertising for such a technique.

12. Claim 14 is rejected under 35 U.S.C. 103(a) as unpatentable over DeLeeuw in view of Delhi in further view of Yokomizo et al (US PGPub 2002/0067500 A1)('Yokomizo') and Morris (US PGPub 2003/0200268 A1)('Morris').

As to claim 14,

A computer network based process comprising the steps of:

A. At least one end user supplying at least two base images to an image interrogation means; (Yokomizo 0014-0015 and 0048; Morris 0004-0008 and 0010-0011)

B. The image interrogation means checking the base images for suitability and size; (Yokomizo 0030; DeLeeuw (the two images being from the operating system and the camera are automatically formatted properly and then to the frame buffer; the operating system and/or video card handle the image processing automatically.)

C. Preparing at least two base images in digital format;

D. Selecting a pattern wherein said pattern comprises a multiplicity of cells, each cell having *n* regions wherein *n* is the number of prepared based images and wherein each region of a cell is assigned to a different prepared base image;

E. Applying the pattern to each base image;

F. Selecting a mergable portion of each respective base image wherein the mergable portion includes a tile corresponding to the region of each cell assigned to the respective base images;

G. Merging of the mergable portions of each respective base image to provide a merged image; and

H. Forwarding the merged image to the end user. (Yokomizo Fig. 1, which clearly illustrates that images are processed on the remote server representing the dealer's head office, e.g. element 9. See also Morris 0018-0021)

Steps C-G are covered in the rejection to claim 1, which is hereby incorporated by reference in its entirety. References DeLeeuw and Delhi do not explicitly teach these limitations. The system of Yokomizo involves having the images from digital photographs stored on a remote server, and the user downloads a small version of the high-resolution image, performs operations on it, and sends the results back to the server, where the server actually performs the desired operations (clips, cuts, rotations, scaling, zooming, image extraction, matte and color correction, sharpening, red eye processing, etc. [0030]) on the high-resolution version. Reference Morris provides a means for users to store their images remotely on a server and share them with other people, including emailing them. The system of Yokomizo [0048] can also provide files

after the image processing done remotely [0050] by CD, floppy, etc., and could just as easily be emailed out as the system of Morris does. The only constraint on the Yokomizo system is bandwidth, so with high bandwidth available (e.g. cable modem, DSL, etc.) using the remote server for near real-time image processing applications becomes feasible. Using the technologies of Morris would allow the results to be sent back to the user via email or a website and allow the user to share their work with others. Further, the system or software of DeLeeuw automatically formats video images at the operating system or video card level so that it will fit in the frame buffer and reformats it automatically if necessary. Since the high-resolution images are / would be processed remotely, obviously they would be scanned (Yokomizo) and validated beforehand, but it would be an obvious modification if sufficient bandwidth were available to do the image validation on the remote server upon upload using either the logic behind why it would be done in the first place at scan time of Yokomizo or the automatic formatting of DeLeeuw.

Reference Delhi teaches the use of processed mosaic images in advertising. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the video mosaics and overlays of DeLeeuw and Delhi with the image processing systems of Morris and Yokomizo, since if a public video terminal were equipped with the software of Delhi and DeLeeuw as taught in claim 1, such transparent mosaics could be publicly displayed for advertising purposes after mosaic images were rendered and sent back to the end user for review, which would happen using the photo-sharing technology of Morris or email.

13. Claims 15-16 are rejected under 35 U.S.C. 103(a) as unpatentable over DeLeeuw in view of Delhi in further view of Yokomizo and Morris as applied to claim 14, and further in view of Kimura et al (US PGPub 2003/0025933 A1)('Kimura').

As to claim 15,

A computer network based process as claimed according to claim 14 wherein the base images are forwarded to an interrogation means which then forwards the base images to a third party for the application of the process for the creation of the merged digital image.

References DeLeeuw, Delhi, and Morris do not explicitly teach this limitation. Reference Yokomizo implicitly teaches this limitation, where the user brings their photographs to the dealer branch shops (Fig. 1) and the dealer then scans them and sends them to the dealer head shop. Obviously, such dealer shops could be franchises that were independently owned, and the dealer head shop would be an effective third party, and users could upload pictures to the dealer shops rather than physically bringing them in.

Reference Kimura explicitly teaches this limitation, wherein in 0019-0021 and Fig. 4 Kimura teaches that users can observe an image that they want, download a thumbnail, place an order for said image (taken from, for example, a sporting event by a TV station or professional photographer), pay for said image, and then send it to a "photo finishing" location where it will processed as they desire (e.g. zoomed in, blown up, rotated, scaled, cropped, etc.) and the final product sent to them (obviously, it could be downloaded [0089] or sent to them via mail or email (see technology of Morris)).

This fulfills the recited limitation, where the interrogation means, etc., are the combined servers of Morris and Yokomizo as discussed in the rejection to claim 14, and thusly the images would be sent to the third party (the photo finisher) to perform the processing of Delhi and DeLeeuw as recited in the above claim.

Reference Delhi teaches the use of processed mosaic images in advertising. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the video mosaics and overlays of DeLeeuw and Delhi with the image processing systems of Morris and Yokomizo, since if a public video terminal were equipped with the software of Delhi and DeLeeuw as taught in claim 1, such transparent mosaics could be publicly displayed for advertising purposes after mosaic images were rendered and sent back to the end user for review, which would happen using the photo-sharing technology of Morris or email, and further the use of the technology of Kimura would allow an advertiser or user to download a picture of a famous event or person (e.g. an athlete), add that image to an advertisement or simply a public display after the end results of the processing operations performed by a third party were complete and the image was returned via the technology of Morris or Yokomizo.

As to claim 16,

A computer network based process as claimed according to claim 14 wherein the third party is able to control the quality of the merged images produced.

References DeLeeuw, Delhi, Morris, and Yokomizo do not explicitly teach this limitation. Reference Kimura teaches that the third party performs image enhancement or resolution conversion [0032], which *prima facie* meets the recited limitations of the

above claim. The technology would allow for the systems of the above four references to be used more efficiently and allow the user to have the desired image processed in different ways to achieve a more aesthetically pleasing end result. The motivation and combination of claim 15 is hereby incorporated via reference without further comment.

14. Claims 17-19 are rejected under 35 U.S.C. 103(a) as unpatentable over DeLeeuw in view of Delhi, Morris, Yokomizo, and Kimura as applied to claim 16 above, and further in view of Ginter et al (US PGPub 2004/0054630 A1)('Ginter').

As to claim 17,

A computer network based process as claimed according to claim 15, wherein the third party is a licensor of the process for the creation of the merged digital image and selectively control access and use of the process through license agreements with at least one licensee.

References DeLeeuw, Delhi, Morris, and Yokomizo do not explicitly teach this limitation. Reference Kimura implicitly teaches this limitation, in that the third party controls access to the process, but does not teach intellectual property specifically licensed as a process (e.g. the images themselves are controlled, and the higher resolution versions). Reference Ginter teaches licensing of intellectual property with licensees (see, for example, 0010 and 0023), where intellectual property is defined to include software (0007) that could execute the processes of DeLeeuw and Delhi, and that license agreements control access to content and functionality (0015-0026, various types of entities that would subscribe to such functionality, how it can be applied to almost any circumstance, etc.) In 0630 Ginter discloses the specific use of DRM / VRE

software to control the actions of a licensee, including enforcing audit procedures required for a licensee, etc. Clearly, the process of Ginter could be applied to any kind of information services provided over networks, etc, as in the combination of the systems of Morris and Yokomizo as covered in the rejections to claims 14 and 16, and the business model would be obvious, as this is taught by Ginter, and is only an obvious extension of what was rejected under claim 16 above, which rejection is hereby incorporated by reference in its entirety. Finally, Ginter clearly establishes that users pay royalties / license payments for use of content because of the VRE software – e.g. 0200 and 1821.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the processes of Delhi and DeLeeuw with the systems of Morris and Yokomizo for delivery and transmission purposes, along with the content management structures and business methods of Ginter and Kimura (the motivation and combination from claim 16 is hereby incorporated by reference), as the addition of the electronic rights protection and management as well as the business models of Ginter to those of Kimura would enable the third party to control the use and access to such material with the protective attributes of the VRE software, which would enhance the protection given to such images (and processes) via the system of Kimura.

As to claim 18,

A computer network based process as claimed according to claim 17 wherein according to the license agreement, the third party/licensor collects income in the form of license or royalty payments from licensees, according to predetermined parameters of the base

images or merged images. [First 4 references do not explicitly teach these limitations (e.g. DeLeeuw, Delhi, Morris, and Yokomizo).]

Clearly, as discussed in the rejection to claim 16 above, the third party does collect income from the user or individual who submitted the images to be processed under the system of Kimura. As taught in Ginter and discussed in the above rejection to claim 17, license payments and royalties are paid out on use of content as per license agreements as covered 0015-0025. Ginter teaches predetermined parameters or the payment for aspects thereof in (0161, 0211, 1912, 1936) for content, which would *prima facie* include images. Therefore, all the limitations are met as recited above. The motivation and combination of the parent claim are hereby incorporated via reference in their entirety.

As to claim 19,

A computer network based process as claimed according to claim 17 wherein the third party / licensor is able to accurately track individual merged images and the quantity of base images and/or merged images output for a particular operator/licensee. [First 4 references do not explicitly teach these limitations (e.g. DeLeeuw, Delhi, Morris, and Yokomizo).]

Clearly, as discussed in the rejection to claims 16 and 17 above, particularly that of claim 16, reference Kimura teaches that for the user to get anything other than a thumbnail version of the image, they have to compensate the copyright owner, which would fulfill the recited limitations, since every use of the content would have to be paid for and pass through an external server for validation (e.g. the services of Morris and

Yokomizo). Further, Ginter clearly teaches the ability to track the number of uses of an object (0404-0411) [tracking quantity of base images input would be *prima facie* obvious and a trivial modification, as it would simply require counting the number of files submitted to the licensee for processing per run of the process for generating the mosaics]. Further, in 0404-0411 Ginter teaches the use of "meter" software that can monitor all the circumstances of use of a licensed piece of process, software, intellectual property, etc. that specifically meets all the limitations recited by applicant. The motivation and combination of claim 17 is hereby incorporated herein by reference in its entirety, in addition to the above-discussed motivation.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the processes of Delhi and DeLeeuw with the systems of Morris and Yokomizo for delivery and transmission purposes, along with the content management structures and business methods of Ginter and Kimura (the motivation and combination from claim 16 is hereby incorporated by reference), as the addition of the electronic rights protection and management as well as the business models of Ginter to those of Kimura would enable the third party to control the use and access to such material with the protective attributes of the VRE software, which would enhance the protection given to such images (and processes) via the system of Kimura.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric V Woods whose telephone number is 703-305-0263. The examiner can normally be reached on M-F 7:30-5:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Eric Woods

December 6, 2004

JEFFERY BRIER
PRIMARY EXAMINER